

Magnetizing Roasting of Low-Grade Iron Ores, by  
H. Hendrickx, G. Scheibe

GERMAN, per, Archiv f. d. Eisenhüttenwesen, Vol  
XXIII, No 9-10, 1952, pp 321-324.

Brutcher Tr 3212

Scientific - Minerals/Metals  
CTS/DEX

Price \$6.60

9282

Tral Production of Low-Nitrogen Steels in Basic-  
Lined Baby Converter, by K. G. Speith, H. Ducken

P.D

GERMAN, per, Archiv Eisenhüttenwesen, Vol XKIII,  
No 9-10, 1952, pp 325-333.

Brutcher Tr 2997

Scientific - Minerals/Metals

CTS/DEX

Price \$9.60

8528

Technic Measurements in Gray Cast Iron by X-ray and  
Mechanical Methods, by V. Hauk, UNCLASSIFIED

GERMAN, per, Archiv Eisenhüttenwesen, Vol XXIII,  
No 9/10, 1952, pp 353-361.

Brutcher No 3289

Scientific - Min/Metals

\$7.80

15,480

Surface Impregnation of Plain Carbon Steel with  
Tungsten or Molybdenum from Salt Baths, by E. Fitzer.

GERMAN, per, Archiv fur das Eisenhuttewesen, Vol XXIII,  
No 9-10, 1952, pp 369-375.

Brutcher Trans No 2975

Scientific - Metallurgy, tungsten, molybdenum, steel

Carburizing, Nitriding, and Siliconizing of Tungstenized and Molybdenized Cases on Iron and Steel, by E. Fitzer.

Full translation.

GERMAN, per, Archiv fur das Eisenhüttenwesen, Vol XXIII, No 9-10, 1952, pp 377-382.

Brutcher Tr No 2982

EEur - Germany

Scientific - Electrolytic, iron, steel

The Treatment of Liquid Open-Hearth Steel With  
Solid Electric Furnace Slag, and the  
Metallurgical Processes During Tapping, by  
Heinz Siegel, 15 pp.

GERMAN, per, Archiv fur das Eisenhutenwesen,  
Vol XXIII, No 11/12, 1952, pp 417-425.

SIA 60-18288

Sci

Apr 61

146,158

Electromagnetic Alternating-Field Technique for  
Nondestructive Testing of Ferrous Metals, by  
H. Goebbels.

GERMAN, per, Archiv Eisenhüttenwesen, Vol XXIII,  
No 11-12, 1952, pp 443-448.

Brutcher Tr 3139

Scientific - Minerals/Metals

Price \$8.80

Nov 53 CTS

7270

Crystallographic Relationships in the Transformation  
of Iron, by H. Weerfeld. UNCLASSIFIED.

GERMAN, per, Archiv Eisenhüttenwesen, Vol XXIII,  
Nos 11, 12, 1952, pp 471-473.

Brutcher Tr No 3341

Metals  
Scientific - Min/~~Metals~~

17,368



The Treatment of Pig Iron and Steel With Slags as  
a Means of Improving the Quality of the Steel,  
by Edward Seufter, 23 pp.

GERMAN, per, Archiv fur das Eisenhüttenwesen,  
Vol XXIV, No 1/2, 1953, pp 1-10.

SLA 60-18633

Sci

Apr 61

146, 115

J. Haisor

Findings and conclusions from the measurement of  
sounds in the tensile stressing of metallic materials.  
GERMAN, per, Archiv für das Eisenhüttenwesen, Vol 24,  
Jan/Feb 1953, pp 43-45  
Springfields Trans 254

available from CEEB

ALA 60-18395 12 pp  
jul: 72

Ultrasonic Testing of Steel Rolls and Steel  
Cylinders, by H. J. Seemann, W. Bentz

*Pol.*  
GERMAN, per, Archiv Eisenhüttenwesen, Vol XXIV,  
No 1-2, 1953, pp 47-52.

Brutcher Tr 3118

Scientific - Minerals/Metals  
CTS/DEX Price \$5.60

7897

Flow Processes in Branch Pipes as a Basis for  
Coke-Oven Heating, by P. Veit. UNCL

GERMAN, per, Arch Eisenhuettenwesen, Vol XXIV,  
No 3/4, 1953, pp 93-103.

British Iron and Steel Ind  
(no number given)

Sci - Phys  
Sep 59

98,420

Formation and Properties of Delta Iron (Ferrite)  
and Sigma Phase in Austenitic Chromium-Nickel Steels.  
Part I, by H. Buchholtz, H. Krachter, F. Kraemer.

GERMAN, per, Archiv fur Eisenhuettenwesen, Vol XXIV,  
No 3-4, 1953, pp 113-119.

Butcher Tr 3150

Scientific - Minerals/Metals

Price \$9.80

Nov 53 CTS

7280

Formation and Properties of Delta Iron (Ferrite) and  
Sigma Phase in Austenitic Chromium-Nickel Steels, Part  
II, by H. Buchholtz, H. Krachter, P. Kraemer

GERMAN, per, Archiv Eisenhüttenwesen, Vol XXIV, No 3-4,  
1953, pp 119-125.

Brutcher Tr 3151

Scientific - Minerals/Metals

CTS/DEX

Price \$9.85

7853

On the Irreversibility of Iron-Nickel Alloys, by  
E. Scheil,

GERMAN, per, Archiv Eisenhuten, Vol XXIV, Nos 3/4,  
1953, pp 153-160.

Brutcher Tr No 3349  
\$9.80

Scientific - Min/Metals

Feb 55 CTS

21,080

Nucleation in Transformations in the Irreversible  
Iron-Nickel Alloys, by G. Masing, O. Nickel.

GERMAN, per, Archiv Eisenhüttenwesen, Vol XXIV,  
Nos 3, 4, 1953, pp 143-151.

Brutcher Tr  
No 3348

Scientific - Min/Metals

Jan 55 CTS/DEX

20,898



Theory of Sealing Processes on Metallic Alloys,  
by Hauffe, Karl.

GERMAN, per, Arch. Eisenhüttenw., Vol XXIV, No 3/4,  
1953, pp 161-171.

AEC 2504  
Assoc Tech Sv  
65G7G

33,047

Sci - Engineering, Electricity, Minerals / Metals.  
(# 17.15)

The Diffusion Grain Growth of Iron Alloys,  
by F. Erdmann-Jesnitzer,  
GERMAN, per. Arch. Eisenh. No 24, 1953, pp 215-  
228.  
\*NBS TT 70-57485

Sci-Mat  
Aug 70

Ultrasonic Inspection by the Through-Transmission  
and Pulse-Reflection Methods, by H. Krainer,  
E. Krainer.

GERMAN, per, Archiv Eisenhüttenwesen, Vol XLIV, Nos  
5, 6, 1953, pp 229-235.

Bruchur Tr No 3378

Min/Metals  
Scientific - ~~XXXXXXXX~~

Dec 54 CTS/DEX

\$8.60

14, 712

Effect of Surface Treatment Upon Sintering  
Characteristics of Metal Powders, by G. Naesser,  
H. Burmeister, UNCLASSIFIED

GERMAN, per, Archiv Eisenhüttenwesen, Vol XXIV,  
No 5/6, pp 251-255.

Butcher 3273

Scientifici - Min/Metals \$7.80

15,469

Corrosion-Resistant Cemented Carbides (Part I of  
Paper entitled "Demented Carbides With High Resistance  
to Corrosion and Scaling)", by J. Hinnuber, O. Rudiger.

GERMAN, ~~1953~~, Archiv Eisenhüttenwesen, Vol XXIV, No 5-6  
1953, pp 267-269.

Brutcher Trans No 3135

Scientific - Minerals/Metals

Sep 53 CTS

\$3.90 price

4853

Concrete Carbides With High Resistance to  
Corrosion and Scaling, by J. Hinnuber, O. Rudiger

GERMAN, per, Archiv Eisenhüttenwesen, Vol. XXIV,  
No 5-6, 1953, pp 269-274.

Brutcher Tr 3136

Scientific - Minerals/Metals  
CTS/DEX

Price ~~£~~ \$7.40

5932

The Relationship of Physical Condition of the Material  
to Phenomena of Hydrogen Diffusion in Unalloyed Steel,  
by Herman Schumann, Friedrich Erdman-Jasnitser.

GERMAN, per, Archiv fuer das Eisenhuettenwesen, Vol  
XXIV, No 7/8, Jul/Aug 1953, pp 353-360.  
CIA 605249

Navy Tr 1534/NRL-636

SLA 54-3181

53,546

Sci - Min/Met

Oct 57

Some Observations Regarding the Creep Behavior of  
Zirconium-Alloyed Steels at 500° C, by W. A.  
Fischer

GERMAN, per, Archiv für das Eisenhüttenwesen, Vol XXIV,  
No 9-10, 1953, pp 397-400.

Brutcher Tr 3328

Scientific - Minerals/Metals  
Jul CTS/DEX

15,972  
Price \$5.40



Ultrasonic Testing of Intricately Shaped Parts,  
by E. Martin, K. Werner,

GERMAN, per, Archiv Eisenhuten, Vol XXIV, No 9-10,  
1953, pp 411-422.

Brutcher Tr No 3291

13,733

Scientific - Min/Metals, Engineering

The Influence of Deformations at Low Temperatures  
on the Properties of Austenitic Stainless  
Steels, by K. Bungardt, R. Oppenheim,  
R. Scherer,

GERMAN, per, Arch Eisenhüttenw., Vol XXIV,  
No 9-10, 1953, pp 423-430.

20,867

TPA3/TIB  
T 4363

Scientific - Min/Metals Feb 55 CTS

On the Cooling Curve of Spheroidal Graphite Cast Iron,  
by A. Wittmoser. UNCLASSIFIED.

GERMAN, per, Archiv Eisenhüttenwesen, Vol XXIV, Nos 9,  
10, 1953, pp 431-434.

Brutcher Tr No 3358

Scientific - Min/Metals.

17, 369

Contributions to the Analysis of ~~x~~ Structural  
Components in Pig and Cast Iron, by W. Koch, J. Bruch,

GERMAN, ~~A~~ per, Archiv ~~E~~x Eisenhüttenw, Vol XXIV,  
~~I~~ No 11/12, 1953, pp 457-~~x~~464.

CRL/T.934

Sci  
Dec 62

Spectrographic Determination of Surface Car-  
burization and Decarburization, by W. Modtke. UNCL

GERMAN, par, Arch Eisenhuettenwesen, Nov-Dec 1953,  
1913, pp 465-467.

British Iron and Steel Ind  
(no number given)

Sci - Phys  
Sep 59

98,209

Anisotropic Changes of Dimension in the Heat  
Treatment of Ledeburitic Chromium Tool Steels,  
by Josef Frenner, 19 p. .

GERMAN, par, Archiv für das Eisenhüttenwesen,  
1953, Vol XXIV, No 11/12, pp 485-495.

SLA 59-15819

Sol  
Jan 60  
Vol 2, No 5

104,603

Wall Thickness Measurement of Steel Bottles  
in Production, by F. Bollenrath, V. Euk. UNCL

GERMAN, per, Arch Eisenhuttewesen, Vol XXIV,  
No 11/12, 1953, pp 515-518.

British Iron and Steel Ind  
(no number given)

Sol - Engr  
Sep59

98,134

Metallographic Examination of Nonmetallic  
Inclusions in Steel by Means of a New Thin-  
Section Method, by Erich Folkhard, 16 pp.

GERMAN, per, Archiv für das Eisenhüttenwesen,  
Vol XIV, No 11/12, 1953, pp 519-522.

SLA 59-10099

Sci Min/Met  
Jun 59  
OES I, 10

GB/54/1862

89,721



Permanent Magnets of ~~XXX~~ Barium Oxide and Ferric Oxide;  
by H. Fahlenbrach, W. Heister,

GERMAN, ~~Dr.~~ Archiv f. ~~B.~~ Eisenhüttenwesen, Vol XXIV,  
No 11-12, 1953, PP 523-528

Brutcher Tr 3229

10,448

Sol - Min/Metals  
CDS/DEX

Price ~~XXX~~ 9.90

Process of Oxidation of Titanium Carbide - Cobalt  
Compositions, *W. Kinna; O. Rüdiger*

GERMAN, per, Archiv für das Eisenhüttenwesen,  
Vol XXIV, No 11-12, 1953, pp 535-542.

Brutcher Tr 3223

Scientific - Minerals/Metals  
CTS/DEX Price \$13.40

11,396

The Metallurgical Behaviour of Chrome Ores,  
by D. Hoenes, G. Volkert. UNCLASSIFIED

GERMAN, per, Arch Eisenhuettenwesen, Jan/Feb  
1954, pp 1-10.

Iron and Steel Inst Tr 1024  
(17.0.0)

71,749

Sci - Min/Met  
Aug 58

The Sampling of Ores and Slags in Iron-  
making, by Kurt Mohl, 12 pp.

GERMAN, per, Archiv für das Eisenhüttenwesen,  
Vol XIV, No 1/2, 1954, pp 33-38.

SLA 60-18634

Sci

Apr 61

146,140

Supercooling of Transformation Processes as  
as a Basis for the Martensite Transformation,  
by E. Koudremont, (Part I), by O. Krisement,

GERMAN, per, Archiv Eisenhüttenwesen, Vol XXIV,  
No 1-2, 1954, pp 53-63.

23,151

Butcher Tr No 3339  
\$8.80

Scientific - Min/Metals

Apr  
May 55 CTB

Supercooling of Transformation Processes as a  
Basis for the Martensite Transformation  
Transformation, Part II, by E. Houliémont,  
O. Krisezent,

GERMAN, per, Archiv f.d. Eisenhüttenwesen,  
Vol XLIV, No 1/2, 1954, pp 63-67.

23,613 Bratcher Tr No 3310  
#8.20

Scientific - Min/Metals May 59 CFB

Hoenes, Dieter and Volkert, G.  
THE METALLURGICAL BEHAVIOUR OF CHROME  
ORES. [1959] [30] p. 8 refs.  
Order from SLA \$2.60

61-18408

Trans. of Archiv für das Eisenhüttenwesen (West  
Germany) 1954 [v. 25, no. 1] p. 1-10.

DESCRIPTORS: Metallurgical analysis. \*Ores. \*Chro-  
mium alloys, Processing, Refineries, Minerals, Slags,  
Chemical reactions, Melting. \*Iron compounds, Indus-  
trial plants.

From investigations on various chrome ores and fur-  
nace residues, a residue of "bottom fast" ores after the  
pre-melting (a condition necessary for the most satis-  
factory refining behaviour), can be expected from all  
ore deliveries if they contain adequate amounts of dense  
chromite, i.e., chromite which is not mixed with sili-  
cates, especially serpentine. The presence of olivine  
(Metallurgy--Ferrous Metals, TT, v. 6, no. 10) (over)

61-18408

I. Hoenes, D.  
II. Volkert, G.

263

Office of Technical Services

Nielsen, E. J.  
RAPID POLISHING OF METALLOGRAPHIC CAST  
IRON SPECIMENS. [1962] 13p. 14 refs.  
Order from SLA \$1.60 62-18950

Trans. of Arch[iv für das] Eisenh[üttenw[esen]] (West  
Germany) 1954, v. 25, p. 89-92.

DESCRIPTORS: \*Cast iron, Metallography, \*Electro-  
lytic polishing, Impurities, Graphite.

An alternating polishing method for the polishing of  
metallurgical sections with nonmetallic inclusions  
which are not affected by the electrolytic process, is  
described. In this method, electrolytic polishing is  
followed by mechanical polishing. Thus far, the method  
has proved particularly suitable for gray cast iron and  
malleable cast iron with graphite inclusions. The ap-  
propriate procedure, particularly for avoiding a super-  
(Metallurgy--Ferrous Metals, TT, v. 9, no. 6)

62-18950

I. Nielsen, E. J.

Office of Technical Services



Electrochemical Processes Taking Place During the  
Electrolytic Isolation of Structural Components of  
Steels Using Alternating Current, by W. Koch, et al.

GERMAN, per, Archiv fuer das Eisenhuettenwesen,  
Vol XXV, No 3, 4, 1954, pp 93-106.

CRL/T. 959

Sci  
Jun 63

A Contribution to the Testing of Pickling of  
Additives for Their Effectiveness, by H. Hoff,  
G. von der Dunk.

GERMAN, per, Arch. Eisenh., Vol 35, Mar/Apr  
1954, pp 115-123.

BISI 5154

314,528

Sci - Chemistry  
Jan 67

Residual Stresses Set Up by Flame Hardening,  
by H. Buhler,

GERMAN, per, Archiv Eisenhütten., Vol XXV,  
No 3-4, 1954, pp 155-158.

28,141

Butcher Tr No 3465  
\$6.80

Scientific - Min/Metals

Apr  
May 55 CTS

The Investigation of Test-Pieces with Known  
Faults for Characterising the Working Conditions  
in Ultrasonic Testing, by E. Theis, K. Barteld,  
9 pp.

GERMAN, per, Arch Eisenhüttenwerke, Vol XXIII,  
No 3/4, 1954, pp 159-164.

T.I.L./T 4487

SLA 57-1761  
Sci - Minerals/Metals, steel, forging tests,  
metallurgy, 33,878

May 1956

Temperature Dependence of the Movement of Hydro-  
gen in Steel, by K. Lucke,  
GERMAN, per, Arch Eisenh, No 25, 1954, pp 181-  
185.

\*NBS TT 70-57484

Sci-Mat  
Aug 70

Attack of ~~the~~ Iron-Saturated Molten Zinc  
on Iron as Affected by an Antimony Content,  
by D. ~~Hark~~ Horstmann,

GERMAN, per, Archiv Eisenhuten, Vol XXV,  
Nos 5-6, 1954, pp 207-213.

Irutcher Tr No 3407  
\$4.80

21,357

Scientific - Min/Metals Feb 55 CTS

Absorption of Hydrogen by Austenitic Steels Under  
Cathodic Loading, by F. Eisenkolb, H. Ehrlich.

GERMAN, per, Archiv Eisenhüttenwesen, Vol XXV,  
Nos 3, 4, 1954, pp 187-194.

Brutcher Tr  
No 3412

Scientific - Min/Metals Jan 55 CTS/DEX

20,893

The Sampling of Ferro-Alloys and Their Ores, by  
H. Wirtz,

GERMAN, per, ARCH. Eisenhüttenw., Vol <sup>2</sup>XXV,  
1954, pp 225-230.

SLA 60-18635

Iron and Steel Inst  
Tr No 492  
OT/1115

Scientific - Min/Metals

Mar 55 <sup>c</sup>PTS

21,828



Intensified Attack of Molten Zinc on Iron at  
About 930°F, by D. Horstmann.

GERMAN, per, Archiv Eisenhüttenwesen, Vol XXV,  
Nos 5, 6, 1954, ~~SPORIS~~ pp 215-219.

Brutcher Tr  
No 3290

Scientific - Min/Metals Jan 55 CTS/DEX

20,899

The Rate of Diffusion of Iron Atoms in Iron  
From a Carbon and Nitrogen Supersaturated Iron,  
by W. Koster, L. Pangerl. UGCL

GERMAN, per, Arch Eisenhuettenwesen, No 5/6,  
1954, pp 231-240.

British Iron and Steel. Ind  
(no number given)

Sci - Min/Mat  
Sep 59

98,237

Hardness of Martensite as Function of Its  
Carbon Content, by M. Sagisman.

*German*  
~~WISSENSCHAFT~~, per, Archiv Eisenhüttenwesen, Vol XXV,  
No 5/6, 1954, pp 211, 212.

Brutcher Tr

No 3365

*SA-72*

Scientific - Minerals/Metals

CTS/DEX

19,517

The Structure of Zinc Coatings on the Basis  
of Electrochemical Dissolutions, by W. Katz.

GERMAN, per, Archiv fur Eisenhutenwesen,  
Vol XXV, Jul/Aug 1954, pp 307-314.

BISI 2712

Sci - M/M

Jul 62

203,435

List No 137

Rapid Spectrographic Identification of Alloy  
Steels and Ferrous Metal Alloys, by E. Fitzer. UNCL

GERMAN, per, Arch Eisenhuettenwesen, Vol XXV, No 7/8,  
1954, pp 321-326.

British Iron and Steel Ind  
(no number given)

Sci - Phys; Min/Met  
Sep 59

98, 107

Dimensional Changes of Steel on Case Carburizing,  
by B. Finner.

<sup>e</sup>  
GERMAN, no per, Archiv Eisenhüttenwesen, Vol XXV,  
No 7/8, 1954, pp 345-350.

Henry Brucher Tr 3817

\$7.80

Sci - Minerals/Metals  
Feb 1957 CTS

43,894

Braumann and Krachter, H.  
NITRIDING OF AUSTENITIC CHROME-NICKEL-  
MOLYBDENUM STEEL TUBES BY NITROGEN DURING  
AN INTERNAL PRESSURE TEST AT 7000°.  
[1962] 8p.

Order from K-H \$10.00

K-H 5342

Trans. of Archiv für das Eisenhüttenwesen (West Germany) 1964, v. 25, no. 7/8, p. 373-375.

DESCRIPTORS: \*Steel, \*Austenite, Chromium alloys, Nickel alloys, Molybdenum alloys, \*Nitrides, Pressure, Nitrogen, Hardening.

(Metallurgy--Ferrous Metals, TT, v. 8, no. 5)

62-17839

- I. Braumann
- II. Krachter, H.
- III. K-H-5342
- IV. Kresge-Hooker Science Library Associates, Detroit, Mich.

Office of Technical Services

62-16993

Fahlenbrach, H. and Houdremont, E.  
INCREASE IN THE INITIAL PERMEABILITY OF  
LOW-ALLOYED IRON-SILICON- AND IRON-  
ALUMINIUM ALLOYS BY OXIDIZING ANNEALING  
AT LOW TEMPERATURES. [1962] 7p. (figs. tables  
refs. omitted).

Order from SLA \$1.10

62-16993

Trans. of Archiv für das Eisenhüttenwesen (West  
Germany) 1954 [v. 25, no. 7/8] p. 377-381 (Verein]  
D[eutscher] E[isenhüttenleute (West Germany).  
Berichte]-907).

DESCRIPTORS: \*Iron alloys, \*Silicon alloys, \*Alumi-  
num alloys, Permeability, Heat treatment, Annealing,  
Temperature.

Relationship of the increase in the initial permeability  
of iron-silicon alloys with 2.5 to 4.5% Si and Iron-  
(Metallurgy, TT, v. 8, no. 9) (over)

- I. Title: Decarburization
- I. Fahlenbrach, H.
- II. Houdremont, E.
- III. Verein ... Berichte-907

Office of Technical Services



Magnetic and Electromagnetic Sorting of Semi-  
finished Steel and of Mass-Produced Parts,  
by F. Forster,

GERMAN, per, Archiv f.d. Eisenhüttenwesen, Vol XXV,  
No 7/8, 1954, pp 303-392.

23,168

Bruthar Tr No 3467  
\$9.80

Scientific - Min/Metals

Apr  
Box 55 CTS

|                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| <p>Rühl, Karl.<br/>AMERICAN TESTS ON BRITTLE FRACTURE AND<br/>THE RESULTING CONCLUSIONS ON TESTING OF<br/>BRITTLE FRACTURE. 27 Sep 55 [45]p. 48 refs.<br/>Order from SLA \$4.60<br/>61-16301</p> <p>Trans. of Arch[iv für das] Eisenhüttenwesen (West<br/>Germany) 1954, v. 25, Sep/Oct, p. 421-433.</p> <p>DESCRIPTORS: *Steel, Fracture (Mechanics), Tests.</p> <p>(Metallurgy--Ferrous Metals, TT, v. 6, no. 3)</p> | <p>61-16301</p> <p>I. Rühl, Karl</p> <p>175264</p> <p>Office of Technical Services</p> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|

Metallurgical Considerations of the Problem of  
Cleavage Fracture, by E. Houdremont, E. J. Winkler.  
USCL

GERMAN, Arch Eisenhuettenwesen, Vol XXV, Sep/Oct  
~~1951~~ 1954, pp 435-446.

British Iron and Steel Ind  
(no number given)

Sci - Min/Hist  
Sep 59

100,267

Transformation Limits in the Iron-Nickel System  
Below 300°C, by F. Lihl. UGCL

GERMAN, per, Arch Eisenhuettenwesen, Vol XXV,  
Sep/Oct 1954, pp 475-478.

British Iron and Steel Ind  
(no number given)

Sci - Min/Hrt  
Sep 59

98,211

Process of Formation of Sigma Phase in 18% Cr,  
10% Ni, 2% Mo Steel, by F. Braumann, H. Krachter,

GERMAN, per, Archiv f. d. Eisenhüttenwesen,  
Vol XXV, Nos 9-10, 1954, pp 479-488.

23,156

Kratcher Tr No 3447  
\$9.80

Scientific - Min/Metals

Apr 55 CTS

Oxidation of Titanium from Liquid Steel into Slag in  
Basic and Acid High-Frequency Furnaces under Various  
Slags, by P. Bardenheuer, W. A. Fischer, 5600 words.

GERMAN, per, Archiv Eisenhüttenwesen, Vol XXV, No 11/12  
1954, pp 515-521.

26,723

Butcher No 3462  
\$11.20

Scientific - Minerals/metals

Sep 55

Tolerances and Errors Incurred With Temperature Measurement by Thermocouples. Directions for the Practical Applications of Thermocouples and Protective Pipes, by K. Guthmann.

OSMAN, per, Arch. Wissenschaften, Vol XIV, No 11/12, 1954, pp 535-561.

D.S.I.R./27071

Sci - Physics  
Apr 57 CSE/cax

46, 684

The Damping Behaviour of Strained Iron, by W. Koster  
et al.

GERMAN; per, Archiv Eisenhüttenwesen, Vol XXV,  
No 11/12, 1954, pp 569-578.

BISI 2444

Sci - Min/metals

JAN 43 62

180, 718



Effect of Cyclic Stressing Upon Diffusion in Plain  
Carbon Steels, by H. Schenck, E. Schmidtman,

GERMAN, per, Archiv Eisenhutten, Vol XXV, No 11/12,  
1954, pp 579-583.

Brutcher Tr 3500  
\$4.85

25,976

Scientific - Min/Metals

Aug 55 CTS

Aging Processes in Plain Carbon Steels and  
the Effect of Cyclic Stressing on Them,  
by R. Schenck, E. Schmidtman.

GERMAN, per, Archiv Eisenhüttenwesen, Vol  
XXV, No 11/12, 1954, pp 583-588.

Brutcher Tran ~~8581~~ 3579  
\$6.60

Sci - Minerals/Metals

29,813

The Hot-Blast Cupola in the Steel Plant, by  
Th. Kootz, H. Rellermeyer,

GERMAN, per, Archiv Eisenhütten, Vol XXVI,  
No 1, 1955, pp 1-8.

25,277

Brutcher Tr 3513  
\$8.80

' Scientific - Min/Metals

Jul. 55 CTS

Thermodynamic Analysis of ~~Two~~ Two-Component  
and Multi-Component Systems; Part I- Determination  
of Activities of Components in Homogeneous and  
Heterogeneous Systems from Calorimetric Measure-  
ments Alone, by I. W. Oelsen et al.

GERMAN, per, Archiv Eisenhütten, Vol XXVI, No 1,  
1955, pp 19-25.

25,279

Brutcher Tr 3521  
\$8.40

Scientific - Min/Metals

Jul 55 CTS

thermodynamic analysis of two-component and multi-  
Component Systems (Determination of Activities of  
Components in Homogeneous and Heterogeneous Systems  
From Calorimetric Measurements Alone) Part II., by  
W. Oelsen, et al.

GERMAN, per, Archiv Eisenhütten, Vol XXVI, No 1,  
1955, pp 25-35.

26,090

Brutcher Tr 3522  
\$13.00

Scientific - Chemistry, Min/Metals

Aug 55 CTB

Thermodynamic Analysis of Two-Component and Multi-component Systems (Determination of Activities of Components in Homogeneous and Heterogeneous Systems from Calorimetric Measurements Alone) ~~XX~~ Part III, by W. Oalsen and Others, 3900 words.

GERMAN, per, Archiv Eisenhüttenwesen, Vol XXVI, No 1, 1955, pp 35-42.

26, 7/6

Brutcher No 3523  
\$7.80

Scientific - Minerals/metals

Sep 55

Measurement of the Electromotive Forces at  
1500°C and X-Ray Studies of the System  
Ferrous-Oxide/Aluminium-Oxide, by  
W. A. Fischer, A. Hoffmann.  
GERMAN, per. Arch Eisenh., Vol 26, Jan 1955,  
pp 43-50.  
HISI 6994

Sci/Mat  
Dec 68

354,421

The Time Law of the Precipitation of New Phases  
in Solid Solutions, by E. Ilchner.  
GERMAN, per. Archiv fuer Eisenhüttenwesen,  
Vol XXVI, No 1, 1955, pp 59-62  
BISI 3611

Sci - M/M  
May 64

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MILD STEELS. [1961] [49]p. (refs. 26 figs. 1 table  
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Order from SLA \$4.60

61-20481

Trans. of Archiv für das Eisenhüttenwesen (West  
Germany) 1955, v. 26, no. 2, p. 71-98.

DESCRIPTORS: \*Steel, Aging, Tensile properties,  
\*Metallurgical analysis.

(Metallurgy--Ferrous Metals, TT, v. 7, no. 4)

61-20481

1. Wepner, W.

Office of Technical Services

TT-65-12388

Field 11F

Hofmann, W.; Schuhmacher, G.  
THE ORIENTATION RELATIONSHIP BETWEEN AUSTE-  
NITE, THE INTERMEDIATE STAGE STRUCTURE AND  
MARTENSITE (Orientierungszusammenhaenge Zwischen  
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Order from SLA: \$2.60 as TT-65-12388

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I. Hofmann, W.  
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The Activating Potentials of Fe-C Alloys  
and Their Relation to the Chemical Resistance  
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UNCL

GERMAN, per, Arch Eisenhuettenwesen, Feb 1955,  
pp 117-123. *Vol xxvi,*

British Iron and Steel Ind  
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Eci - Chem  
Sep 59

*ATS-62M 406*

*98,352*

Exact Rapid Microanalysis of Gases, by H.  
Feichtinger.

GERMAN, per, Archiv Eisenhüttenwesen, Vol  
XXVI, No 3, 1955, pp 127-30.

Brutcher Tr 4197  
\$4.90

Sci - Chem

Aug 58

68,210

V  
Methods of Etching High-Alloy Chromium and Chrome-  
Nickel Steels for Austenite, Ferrite, Sigma Phase,  
and Carbide, by F. Braumann, G. Pier.

GERMAN, per, Archiv Eisenhüttenwesen, Vol XXVI, No 3,  
1955, pp 145-151.

Bratcher Tr 3763

Sci - Chemistry *min/metals*

Aug 1956

*37,414*

\$7.40

Determination of Small Amounts of Aluminum in  
Steel, by W. Werg, A. Neuberger .

CHRON., par, Arch Eisenhüttenwesen, Vol XXVI,  
No 4, 1955, pp 205-206.

Henry Bratcher Tr 3699

Sci - Minerals/Metals

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May 1956

\$5.90

Indication of the Tendency to Brittle Fracture  
of Steels by Measurement of Yield Stress, Tearing  
Stress and Contraction on Fracture, on Tri-Axially  
Stressed Specimens, by Kochendörfer, Rohrbach.  
UNCLASSIFIED

GERMAN, per, Arch Eisenhüttenwesen, Vol XXVI,  
Apr 1955, pp 213-227.

Iron and Steel Inst Tr 800  
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Sci - Min/Met  
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Model Experiments on the Change of Direction of  
Flow in the Port-End of a Cold-Gas-Fired Open-  
Hearth Furnace, by Michael Hansen, 16 pp.

GERMAN, per, Archiv fur das Eisenhutenwesen,  
Vol XXVI, No 5, 1955, pp 243-251.

SIA 60-18289

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Apr 61

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Thermodynamic Analysis II. The Heat Content  
Curve of a Material from a Single Calorimetric  
Experiment, by Willy Oelsen, Karl Heinz Rieskamp,  
Olaf Oelsen, 48 pp.

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Sci - Chemistry

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Jul 1956

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Investigation of the Tendency of Soft Un-  
Alloyed Steels to Age by Hardness Testing  
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W. Wepner. 12 p.  
GERMAN, per, Archiv fuer das Eisenhuettenwesen,  
Vol 26, No 5, 1955, pp 279-285.  
SLA TT-66-10435

Sci-M&M  
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The Three Component System Iron-Cobalt-  
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GOVERNMENT USE ONLY  
GERMAN, per, Arch Eisenh, Vol 26, No 6,  
1955, pp 345-353.  
NASA TT F-12,146

Sci-Mat  
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Electrochemical Investigation of Corrosion of Alpha-  
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GERMAN, per, Arch Eisenhüttenwesen, Jul 1955, pp 393-  
404.

Co-op Tr Sch Tr 594  
(S6.10.0)

ATS - 80124/E  
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Sci - Min/met  
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Industrial Applications of X-Ray Stress Analysis,  
by A. Schaal,

GERMAN, per, Archiv Eisenhüttenwesen, Vol XXVI,  
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Brutcher Tr 3589

Scientific - Physics, M/M. Oct 55 CTS

Eingemittelt

Electronmicroscope Investigation of the Changes  
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Steel Under Prolonged Tensile Stress at 500°,  
by A. Wever, A. Schrader, 9 pp.

GERMAN, per, Arch Eisenhüttenw, Vol XXVI, 1955,  
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SLA 57-51.

Sci - Minerals/Metals  
Oct 57

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The Limits of Dephosphorization in Iron by Means of  
Lime, by G. Troemel, W. Gelsen. UNCL

GERMAN, per, Arch Eisenhuettenwesen, Sep 1955,  
pp 497-506.

British Iron and Steel Ind 1812  
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Sci - Min/Met  
Sep 59

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The Effect of Annealing Conditions on the Core  
Loss of Hot Rolled Transformer Sheet, by F. Lahl  
and P. Zemann.

GERMAN, per, Arch Eisenhüttenwesen, Sep 1955,  
pp 535-540.

*British Iron and  
Steel Inst 553*

UCS4  
GB 55

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Determination of Pore Size Distribution in Refractory Materials, by L. Zagar.

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Sci - Physics

Jan 58

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The Quartz-Crystobalite Transformation, by Schwiets,  
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GERMAN, per, Arch Eisenhüttenwesen, Oct 1955,  
pp 583-587.

Co-op Tr Sch Tr 595  
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Sci - Min/met  
Jan 58

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Cold Rollability of Transformer Steels Containing  
More than 3.3% Si, by Lihl, Zensch.

GERMAN, per, Arch Eisenhüttenwesen, Oct 1955,  
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Sci - Min/met  
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*British Iron and Steel Ind*  
*57, 714* *987*

Yield Strength of Plain Carbon and Low  
Alloy Steels During Hot Upsetting Under  
a Drop Hammer, by R. Fink et al.  
GERMAN, per, Arch. Eisenh., Vol 26, Nov.  
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BISI 4966

Sci-Materials  
Oct 66

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The Properties of Commercially Hot-Rolled Dynamo  
Sheet, by E. Czerlinsky. UNCL

GERMAN, per, Arch Eisenhuettenwesen, Vol XXVII,  
No 1, 1956; pp 35-40.

British Iron and Steel Ind  
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Sci - Min/Met  
Sep 59

98,110

Diffusion of C in Fe and the Effect of P on Carbon  
Diffusion, by F. Erdmann-Jennitzer.  
GERMAN, per, Arch Eisenh. No 27, 1956. pp 41-43.  
\*NBS TT 70-57535

Sci-Mat  
Aug 70

Precipitation of Carbon From a Supersaturated  
Solution of  $\gamma$ -Iron During Holding, by W. Pitsch,  
K. Lucke. URCL

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pp 45-54.

British Iron and Steel Ind  
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Sci - Chem  
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SLH TT-64-1852/ 98,337

Determination of Rare Earths in Steel, by H. Krapp.

GERMAN, no per, Archiv Eisenhüttenwesen, Vol XXVII,  
No 2, 1956, pp 103-105.

Henry Brutscher  
Tr 3864  
\$4.80

45,129

Sci - Min/Metals; Geophysics  
Mar 1957 CTS/dex



3. Precipitation Processes in Titanium-Stabilized  
Austenitic Nickel-Chromium Steel and Their  
Relation to Intercrystalline Corrosion  
Phenomena, by K. Bongardt, G. Lennartz, 19 pp.

GERMAN, per, Arch Eisenhüttenw, Vol XXVII,  
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ABC Tr-4209

Sci - Phys  
20 Oct 60

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Influence of Oxygen Addition to Blast Upon  
Particle Size of Brown Smoke From Basic Converter  
and of Waste Gas From Arc Furnace, by R. Meldau,  
D. Langhette

GERMAN, no per, Archiv Eisenhuettenwesen,  
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Brucher Tr 3770

\$5.80

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Sci - Min/Metals  
Sep 56 OTS

Investigations on the Rolling and Recrystallization  
Textures of Carbonyl-Iron, by F. Haessner, H. Weik.  
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Steel Ind 997  
(15 15s.0d.)

SLH 61-18417

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Sci - Min/Mat  
May 59

Horstmann, Dietrich.

THE ATTACK OF IRON SATURATED ZINC MELTS  
ON ALUMINUM CONTAINING IRON. [1963] [10]p.  
7 refs.

Order from SLA \$1.10

63-16845

Trans. of Archiv für das Eisenhüttenwesen (West  
Germany) 1956, v. 27, no. 3, p. 161-163 (Max Planck  
Institut für Eisenforschung) (West Germany).  
[Communication]-657; [Verein Deutscher Eisen-  
hüttenleute (West Germany). Berichte-20].

DESCRIPTORS: \*Aluminum, \*Iron, \*Zinc, Melting,  
\*Fused materials, Chemical analysis.

The attack of iron saturated zinc melts is strengthened  
by means of very slight aluminum content in the iron up  
to perhaps 1%. At higher aluminum contents of perhaps  
5% the attack is lower than on aluminum free soft iron.  
(Metallurgy, TT, v. 10, no. 6)

63-16845

I. Horstmann, D.

II. Max ... Communica-  
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III. Verein ... Berichte-20

Office of Technical Services